

## Munitions lab conducts successful JDAM wing test

by Rex Swenson, Munitions Directorate

EGLIN AFB, FLA. — Officials at the Air Force Research Laboratory Munitions Directorate, in conjunction with Alenia Marconi Systems and Boeing, conducted a successful proof of concept test of a modified Joint Direct Attack Munition (JDAM) BLU-109 weapon recently.

Known as the JDAM-ER (for extended range), the weapon incorporates the use of a device called Diamond Back. According to 2<sup>nd</sup> Lt. John Mehrman, JDAM-ER program manager, the Diamond Back is a low cost, high performance wing kit, which features a joined tandem wing design. The wings extend from a compact storage position and, when fully deployed, they form a diamond shaped platform.

Mehrman said the weapon was launched from an F-16 at 20,000 feet and within 4 seconds the wings deployed and it began flying down range on its own. After a 200-second flight, the JDAM-ER splashed in the Gulf of Mexico at a specified GPS coordinate.

“Diamond Back increases the range of the JDAM from 8 to approximately 24 miles when launched at 20,000 feet,” Mehrman said. “This not only extends the range of the weapon, but also helps protect our warfighters by providing



**BOMBS AWAY** — An Air Force plane carries a Joint Direct Attack Munition weapon with a Diamond Back. The Diamond Back is a low cost, high performance wing kit that increases the range of JDAM from 8 to 24 miles when launched at 20,000 feet.

additional survivability for the delivery aircraft. It also allows the attack of multiple, widely separated targets from a single release point.”

A cross range flight demonstration was scheduled for shortly after the Diamond Back test. In that test the JDAM-ER flew 15 miles down range and across 10 miles. @